

ABSTRACT**DATA TRANSMISSION SYSTEM**

5 A data transmission system for short but frequent data pulses comprises a transmitter (10) and a receiver (12). The transmitter comprises a pseudo-random signal generator (16) which governs the time delay between successive timing points and a local oscillator (15) which controls the time of data transmission, and the receiver comprises a corresponding pseudo-
10 random signal generator (22) and local oscillator (24). Power is applied to the receiver substantially only corresponding in time to the timing of the data bursts. Multiple collisions between adjacent systems operating on the same wavelength are avoided and the receiver is controlled to consume power only around the timing of the data bursts.

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(Figure 1)

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